

IN THE CLAIMS

Please amend claims 1 and 43 as follows:

1. (CURRENTLY AMENDED) An apparatus for providing group voice services in a cellular network, comprising:

a cellular network for making calls between handsets, wherein the calls are initiated by call setup and in-band signaling within the cellular network and voice frames for the calls are switched by at least one mobile switching center between the handsets across bearer paths in the cellular network; and

a real-time exchange that interfaces to at least one mobile switching center in the cellular network to provide group voice services therein,

wherein the group voice services provide both a half-duplex Push-to-Talk (P2T) session and a full-duplex Push-to-Conference (P2C) session between an initiator and one or more other participants,

wherein the P2T session comprises a half-duplex dispatch call and the P2C session comprises a full-duplex conference call,

both the real-time exchange and the handsets participating in the P2T session or the P2C session communicate with each other using the call setup and in-band signaling within the cellular network,

such that at least one mobile switching center routes an originating leg of the group voice services from an originating handset to the real-time exchange,

the real-time exchange initiates one or more terminating legs of the group voice services to one or more terminating handset through at least one mobile switching center, and

the real-time exchange switches the voice frames for the group voice services from the originating handset to the terminating handset across the bearer paths and through at least one mobile switching center that switches the voice frames for both the calls and the group voice services in the cellular network; and

the half-duplex P2T session is upgraded to the full-duplex P2C session by invoking “Upgrade to Conference” on one of the handsets participating in the P2T session.

2. (ORIGINAL) The apparatus of claim 1, wherein the participants comprise one or more contacts, one or more groups of contacts, or a subset of a group of contacts.

3. (ORIGINAL) The apparatus of claim 1, wherein the initiator initiates the full-duplex P2C session by invoking “Push-to-Conference” on their handset.

4. (ORIGINAL) The apparatus of claim 1, wherein the initiator upgrades an established half-duplex Push-to-Talk (P2T) session to the full-duplex P2C session by invoking “Upgrade to Conference” on their handset.

5. (PREVIOUSLY PRESENTED) The apparatus of claim 1, wherein the initiator’s handset signals the real-time exchange via the cellular network, and the real-time exchange initiates and manages the full-duplex P2C session.

6. (PREVIOUSLY PRESENTED) The apparatus of claim 1, wherein the real-time exchange causes the cellular network to perform call setup with the other participants for the full-duplex P2C session, and the real-time exchange initiates and manages the full-duplex P2C session.

7. (PREVIOUSLY PRESENTED) The apparatus of claim 1, wherein the real-time exchange causes the cellular network to signal the other participants to join the full-duplex P2C session.

8. (ORIGINAL) The apparatus of claim 1, wherein the other participants invoke “Join Conference” on their handsets to join the full-duplex P2C session.

9. (ORIGINAL) The apparatus of claim 1, wherein the real-time exchange mixes audio streams from the initiator and other participants, and delivers these mixed audio streams to the initiator and other participants.

10. (ORIGINAL) The apparatus of claim 1, wherein the initiator and other participants can choose to remain silent by invoking a “mute” option on their handsets, which causes the handset’s microphone to be muted.

11. (ORIGINAL) The apparatus of claim 1, wherein the initiator can add or drop participants during the full-duplex P2C session.

12. (ORIGINAL) The apparatus of claim 1, wherein the initiator can downgrade the full-duplex P2C session to a half-duplex P2T session.

13. (ORIGINAL) The apparatus of claim 1, wherein all charges related to the full-duplex P2C session are charged to the initiator.

14. (ORIGINAL) The apparatus of claim 1, wherein the full-duplex P2C session is terminated when the initiator disconnects the call, even if the other participants do not disconnect.

15. (ORIGINAL) The apparatus of claim 1, wherein the initiator and other participants in the full-duplex P2C session are all charged for usage.

16. (ORIGINAL) The apparatus of claim 1, wherein the full-duplex P2C session continues when the initiator disconnects the call, if at least two of the other participants do not disconnect.

17-42. (CANCELED)

43. (CURRENTLY AMENDED) A method of providing group voice services in a cellular network, comprising:

making calls between handsets in a cellular network ~~for making calls between handsets,~~
wherein the calls are initiated by call setup and in-band signaling within the cellular network and

voice frames for the calls are switched by at least one mobile switching center between the handsets across bearer paths in the cellular network; and

interfacing a real-time exchange to at least one mobile switching center in the cellular network to provide group voice services therein,

wherein the group voice services provide both a half-duplex Push-to-Talk (P2T) session and a full-duplex Push-to-Conference (P2C) session between an initiator and one or more other participants,

wherein the P2T session comprises a half-duplex dispatch call and the P2C session comprises a full-duplex conference call,

both the real-time exchange and the handsets participating in the P2T session or the P2C session communicate with each other using the call setup and in-band signaling within the cellular network,

such that at least one mobile switching center routes an originating leg of the group voice services from an originating handset to the real-time exchange,

the real-time exchange initiates one or more terminating legs of the group voice services to one or more terminating handset through at least one mobile switching center, and

the real-time exchange switches the voice frames for the group voice services from the originating handset to the terminating handset across the bearer paths and through at least one mobile switching center that switches the voice frames for both the calls and the group voice services in the cellular network; and

the half-duplex P2T session is upgraded to the full-duplex P2C session by invoking “Upgrade to Conference” on one of the handsets participating in the P2T session.

44. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the participants comprise one or more contacts, one or more groups of contacts, or a subset of a group of contacts.

45. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator initiates the full-duplex P2C session by invoking “Push-to-Conference” on their handset.

46. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator upgrades an established half-duplex Push-to-Talk (P2T) session to the full-duplex P2C session by invoking “Upgrade to Conference” on their handset.

47. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator’s handset signals the real-time exchange via the cellular network, and the real-time exchange initiates and manages the full-duplex P2C session.

48. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the real-time exchange causes the cellular network to perform call setup with the other participants for the full-duplex P2C session, and the real-time exchange initiates and manages the full-duplex P2C session.

49. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the real-time exchange causes the cellular network to signal the other participants to join the full-duplex P2C session.

50. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the other participants invoke “Join Conference” on their handsets to join the full-duplex P2C session.

51. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the real-time exchange mixes audio streams from the initiator and other participants, and delivers these mixed audio streams to the initiator and other participants.

52. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator and other participants can choose to remain silent by invoking a “mute” option on their handsets, which causes the handset’s microphone to be muted.

53. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator can add or drop participants during the full-duplex P2C session.

54. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator can downgrade the full-duplex P2C session to a half-duplex P2T session.

55. (PREVIOUSLY PRESENTED) The method of claim 43, wherein all charges related to the full-duplex P2C session are charged to the initiator.

56. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the full-duplex P2C session is terminated when the initiator disconnects the call, even if the other participants do not disconnect.

57. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the initiator and other participants in the full-duplex P2C session are all charged for usage.

58. (PREVIOUSLY PRESENTED) The method of claim 43, wherein the full-duplex P2C session continues when the initiator disconnects the call, if at least two of the other participants do not disconnect.